

# Appendix B - Subbasin Review Report - Andrews Management Unit/Steens Mountain Cooperative Management and Protection

## Introduction

“The Interior Columbia Basin Ecosystem Management Project (ICBEMP) was established in 1994...to develop and then adopt a scientifically sound ecosystem based strategy for managing all USFS or BLM administered lands within the (Interior Columbia) Basin.” (Status of the Interior Columbia Basin, Summary of Scientific Findings [USFS 1996]). The ICBEMP covered an area of 145 million acres, 53 percent of which is public land managed by the BLM or the USFS. The size of this area requires some means to bring findings and information down to a level where they can be applied in a USFS or BLM management unit such as a ranger district or resource area. A process was developed with which the pertinent information could be “stepped down” to the local management level. This is called the subbasin review process.

The ICBEMP area was divided for analysis and review purposes into four geographic scales: broad-scale (Interior Columbia Basin), mid-scale (subbasins or groups of subbasins), fine-scale (watershed), and site scale (project). The mid-scale or subbasin level is the level at which field offices would undertake long range planning for all resources within their respective administrative boundaries. The subbasins are based on the US Geological Survey 4<sup>th</sup> field hydrologic unit codes (HUCs). On average these 4<sup>th</sup> field HUCs comprise an area of 500,000 to 1,000,000 acres. The Planning Area subbasin review area included six subbasins identified in the ICBEMP scientific assessment: Guano, Harney/Malheur Lakes, Alvord Lake, Donner und Blitzen, Thousand-Virgin, and Crooked-Rattlesnake comprising an area of approximately 6,200,110 million acres. Land ownership and administrative responsibilities included private, county, State of Oregon, BLM, and USFWS. The majority of the land in the Planning Area portion of the subbasin review area is administered by the BLM, Burns DO (Figure 2.9). Only those portions of the subbasins in the Planning Area are described.

In anticipation of preparing a comprehensive RMP/EIS, the Burns DO collected a considerable amount of data and information about the resources on BLM administered lands. Much of this information was in GIS format. Data and information needed for the resources in the subbasin review area and from other agencies were identified prior to preparation of the AMS/subbasin review.

A BLM team was assembled to be the core group responsible for gathering data and putting it into a written or GIS format. This team was comprised of a planning/NEPA specialist, a wildlife biologist, a fisheries biologist, a botanist, a recreation specialist, a wilderness specialist, a GIS specialist and a management support specialist. This core group is also part of a larger Inter Disciplinary (ID) team comprised of many other resource specialists and representatives for cooperating agencies. The subbasin review team would deal primarily with health-of-the-land issues.

## Issues and Findings

Broad-scale information from the ICBEMP provides a general characterization of the Planning Area subbasin review area relative to the rest of the Interior Columbia Basin. The broad-scale information indicates that essentially 100 percent of this subbasin review area is rangeland. Rangeland in the subbasin review area is classified as low integrity. The rangeland is described as being dominated by dry shrubland vegetation that is highly sensitive to overgrazing and susceptible to invasion by noxious weeds. Hydrologic integrity is low to moderate and the integrity of riparian environments is commonly low. Some native fish species occur in highly fragmented habitat.

The conditions described above significantly increase the subbasins’ susceptibility to wildland fire, insects and disease, soil erosion, loss of native species, and other problems that threaten ecological integrity, water quality, species recovery, timber and forage production, and other uses of public lands (Integrated Scientific Assessment for Ecosystem Management in the Interior Columbia Basin, USFS, BLM 1996).

Potential issues were identified by the Burns DO prior to the beginning of the subbasin review process and are included in Section 1.4.2 (Planning Criteria) of the RMP/EIS. These mid-scale issues generally reflect many of the broad-scale findings in the ICBEMP scientific assessment.

The group then examined the list of findings in “Using Key Broad-scale Findings in Mid-scale Issue Identification” documented in the ICBEMP Scientific Assessment (Quigley and Arbelbide 1997) and EIS. The participants determined that many of the findings applied to the Planning Area subbasin review area. Some of the findings were modified to more accurately reflect conditions within the Planning Area subbasin review. Of the approximately 60 findings or conditions listed, only 18 were considered not applicable to the Planning Area subbasin review. Either the resources did not occur in the area or conditions were known to be better than indicated in the ICBEMP findings.

The findings dealt primarily with terrestrial and aquatic habitat, water quality, riparian health, landscape health, and social and economic concerns including tribal rights. The group then developed the refined list of broad scale findings. These were discussed and small changes were made. Several findings dealt with designated priority issues including noxious weed and juniper expansion, water quality, special status species management, aquatic habitat, and riparian and wetland vegetation. Listed at the end of this chapter are those findings the group felt were not applicable to the Planning Area subbasin review. A complete description of the individual findings follows.

### **Revised List of Key Broad-Scale Findings Used in Issue Identification for the Andrews MU/Steens Mountain CMPA Subbasin Review Area**

These findings are from *Ecosystem Review at the Subbasin Scale (Subbasin Review), Volume 1 - The Process*, August 1999, Appendix A. As stated above, some findings have been modified to more accurately reflect conditions within the Planning Area subbasin review. The ICBEMP did not address issues related to current management practices on cultural resources, including archaeological and Native American traditional values, and are therefore not addressed in this section.

#### *Terrestrial Habitat/Landscape Health*

##### (1) Rangelands

- Noxious weeds are spreading on roadway disturbance.
- Woody species encroachment by and/or increasing density of woody species (sagebrush and juniper), especially on dry grasslands and cool shrublands, has reduced herbaceous understory and biodiversity.
- Cheatgrass has taken over many dry shrublands, increasing soil erosion and fire frequency and reducing biodiversity and wildlife habitat. Cheatgrass and other exotic plant infestations have simplified species composition, reduced biodiversity, changed species interactions and forage availability, and reduced the systems' ability to buffer against changes.
- Expansion of agricultural and urban areas on non-federal lands has reduced the extent of some rangeland potential vegetation groups, most notably dry grasslands, dry shrublands, and riparian areas. Changes in some of the remaining habitat patches and loss of native species diversity have contributed to a number of wildlife species declines, some to the point of special concern (such as sage-grouse, Columbian sharp-tailed grouse, California bighorn sheep, pygmy rabbit, kit fox, and Washington ground squirrel).
- Increased fragmentation and loss of connectivity within and between blocks of habitat, especially in shrub steppe and riparian areas, have isolated some habitats and populations and reduced the ability of populations to move across the landscape, resulting in long-term loss of genetic interchange.
- Slow-to-recover rangelands (in general, rangelands that receive less than 12 inches of precipitation per year) are not recovering naturally at a pace that is acceptable to the general public, and are either highly susceptible to degradation or already dominated by cheatgrass and noxious weeds.
- Fire frequency has decreased in many locations resulting in an increase in conifer encroachment; an increase in tree density in formerly savanna-like stands of juniper and ponderosa pine; and increased density and/or coverage of big sagebrush and other shrubs, with an accompanying loss of herbaceous vegetation.
- Fire frequency has increased in some areas, particularly in drier locations where exotic annual grasses have become established. Increased fire frequency has caused a loss of shrub cover and reduction in bunchgrasses.

##### (2) Forests

- Interior ponderosa pine has decreased across its range with a significant decrease in old single story structure. The primary transitions were to interior Douglas fir and grand fir/white fir.
- There has been a loss of the large tree component (live and dead) within roaded and harvested areas. This decrease affects terrestrial wildlife species that are closely associated with these old forest structures.

- Western larch has decreased across its range. The primary transitions were to interior Douglas fir, lodgepole pine, or grand fir/white fir.
- Western white pine has decreased by 95 percent across its range. The primary transitions were to grand fir/white fir, western larch, and shrub/herb/tree regeneration.
- The whitebark pine/alpine larch potential vegetation type has decreased by 95 percent across its range, primarily through a transition into the whitebark pine cover type. Overall, however, the whitebark pine cover stand has also decreased, with compensating increases in Engelmann spruce/subalpine fir.
- Generally, mid-seral forest structures have increased in dry and moist forest potential vegetation groups (PVG), with a loss of large, scattered, and residual shade-intolerant tree components, and an increase in the density of smaller shade-tolerant diameter trees.
- There has been an increase in fragmentation and a loss of connectivity within and between blocks of late-seral, old forests, especially in lower elevation forests and riparian areas. This has isolated some animal habitats and populations and reduced the ability of populations to move across the landscape, resulting in a long-term loss of genetic interchange.
- Habitat for several forest carnivores and omnivores is in decline.
- Insects and diseases always existed in forests, but the size and intensity of their attacks has increased in recent years due to increased stand density.
- Dry forests have had an increase in fuel loading, duff depth, stand density, and a fuel ladder that can carry fire from the surface into the tree crowns. As a result, wildfire intensity has increased.
- Noxious weeds are spreading rapidly, and in some cases exponentially, in most dry forest types.

#### *Aquatic Habitat/Landscape Health*

##### (3) Hydrology and Watershed Processes

- Management activities throughout watersheds in the Planning Area have affected the quantity and quality of water, processes of sedimentation and erosion, and the production and distribution of organic material, thus affecting hydrologic conditions.

##### (4) Source Habitat

- Source habitats for the majority of species in the basin declined strongly (>20 percent decline) from historical to current.
- The strongest declines were for species dependent on low-elevation, old-forest habitats, species dependent on combinations of rangeland or early-seral forests with late-seral forests, and species dependent on native grassland and open canopy sagebrush habitats (Wisdom et al., in press).
- Primary causes of decline in old-forest habitats and early-seral habitats are intensive timber harvest and large-scale fir exclusion.
- Primary causes for decline in native herbland, woodland, grassland, and sagebrush habitats are excessive livestock grazing, invasion of exotic plants, and conversion of land to agriculture, residential, and urban development. Altered fire regimes have also contributed to a decline in grassland and shrubland habitats.
- A variety of road-associated factors negatively affect habitats or populations of many species.
- Human interactions with wide-ranging carnivores are generally negative and large areas of the basin may not be used by wide-ranging carnivores; because of this, habitats for many riparian dependent terrestrial species, especially shrubland habitats, have declined.
- Snag and down wood habitats in managed woodland and riparian areas have declined.

##### (5) Streams, Rivers and Lakes

- Banks and beds of streams, rivers, and lakes have been altered. In general, the changes have been greatest for the larger streams, rivers, and lakes.
- Water quantity and flow rates have been locally affected.
- Many BLM administered streams are “water quality limited” as defined by the Clean Water Act. On Forest Service-administered lands, the primary water quality problems are sedimentation, turbidity, flow alteration, and elevated temperatures. On BLM administered lands, sedimentation, turbidity, and elevated temperatures are the primary reasons for listing as water quality limited.
- Streams and rivers are highly variable across the project area, reflecting diverse physical settings and disturbance histories. Nevertheless, important aspects of fish habitat, such as pool frequency and large woody debris abundance, have decreased throughout much of the project area.

(6) Riparian Areas and Wetlands

- The overall extent and continuity of riparian areas and wetlands has decreased.
- Riparian ecosystem function, has decreased in most subbasins within the project area.
- A majority of riparian areas on BLM administered lands are either “not meeting objectives,” “non-functioning,” or “functioning at risk.” However, the rate has slowed and a few areas show increases in riparian cover and large trees.
- Within riparian woodlands, the abundance of mid-seral vegetation has increased, whereas the abundance of late and early seral structural stages has decreased.
- Within riparian shrublands, there has been extensive spread of western juniper and introduction of exotic grasses and forbs.
- The frequency and extent of seasonal floodplain and wetland inundation has been altered by changes in flow regime, and by changes in channel morphology.
- There is an overall decrease in large trees and late seral vegetation in riparian areas.
- Riparian areas are important for about three quarters of the terrestrial wildlife species. Wildlife numbers have declined in proportion to the decline in riparian habitat conditions.

(7) Fish

- The composition, distribution, and status of fishes within the Planning Area are substantially different than they were historically. Some native fishes have been eliminated from large portions of their historical ranges.
- Many native nongame fish are vulnerable because of their restricted distribution or fragile or unique habitats.
- Although several of the key salmonids are still broadly distributed (notably the cutthroat trouts and redband trout), declines in abundance, loss of life history patterns, local extinctions, and fragmentation and isolation in smaller blocks of high quality habitat are apparent.
- Wild chinook salmon and steelhead are near extinction in a major part of their remaining distribution.
- Core areas for rebuilding and maintaining biological diversity associated with native fishes still exist within the basin.

*Landscape Health*

(8) Air Quality

- The current condition of air quality in the project area is considered good, relative to other areas of the country.
- Wildland fires significantly affect the air resources. Current wildland fires produce higher levels of smoke emissions than historically. Within the project area, the current trend in prescribed fire use is expected to result in an increase of smoke emissions.

*Social/Economic*

(9) Human Uses and Values

- The Planning Area is sparsely populated and rural, especially in areas with a large amount of agency lands.
- Development for a growing human population is encroaching on previously undeveloped areas adjacent to lands administered by the BLM. New development can put stress on the political and physical infrastructure of rural communities, diminish habitat for some wildlife, and increase agency costs to manage fire to protect people and structures.
- Recreation is an important use of agency lands in the Planning Area in terms of economic value and amount of use. Most recreation use is tied to roads and accessible water bodies, though primitive and semi-primitive recreation is also important.
- Industries customarily served by agency land uses, such as logging, wood products manufacturing and livestock grazing, no longer dictate the economic prosperity of the region, but remain economically and culturally important in rural areas. The economic dependence of communities on these industries is highest in areas that are geographically isolated and offer few alternative employment opportunities.
- The public, including individuals and Harney County through gross receipts sharing, has invested substantial land and capital to develop road systems on agency lands, primarily to serve commodity uses.

- For those counties that have benefitted from federal sharing of gross receipts from commodity sales on agency lands, changing levels of commodity outputs can affect county budgets.
- Agency social and economic policy has emphasized the goal of supporting rural communities, specifically promoting stability in those communities deemed dependent on agency timber harvest and processing. Even-flow of timber sales, timber sale bidding methods, timber export restrictions, and small business set asides of timber sales have been the major policy tools on Forest Service-administered commercial forestlands. Regulation of grazing practices has been important on BLM administered rangelands.
- The factors that appear to help make communities resilient to economic and social change include population size and growth rate, economic diversity, social and cultural attributes, amenity setting, and quality of life. The ability of agencies to improve community resiliency depends on the effectiveness of agency land uses and management strategies to positively influence these factors.
- Predictability in timber sale volume from agency lands has been increasingly difficult to achieve. Advancing knowledge of ecosystem processes, changing societal goals, and changing forest conditions has undermined conventional assumptions underlying the quantity and regularity of timber supply from agency lands.
- Lands now administered by the BLM make up the traditional homelands of affected American Indian Tribes. Land management actions and decisions on these lands affect the rights and/or interests of these tribes and their members.
- American Indian tribes in the Basin depend on lands and resources administered by the BLM for a myriad of needs and uses ranging from subsistence uses and economic purposes to religious and cultural purposes.
- Agency social and economic policy has emphasized the goal of supporting rural communities, including tribal communities. The ability of agencies to assist tribal members and tribal communities depends on the effectiveness of agency land uses and management strategies to positively consider and influence these factors (tribal employment, subsistence, treaty/reserved rights, spiritual, cultural/social purposes).

#### (10) American Indian Rights and Interests

- There is low confidence and trust that American Indian rights and interests are considered when decisions are proposed and made for actions to be taken on BLM administered lands.
- American Indian values on federal lands may be affected by proposed actions on woodlands and rangelands because of changes in vegetation structure, composition, and density; existing roads; and watershed conditions.
- Indian tribes do not feel that they are involved in the decision-making process commensurate with their legal status. They do not feel that government-to-government consultation is taking place.
- Culturally significant species such as anadromous fish and the habitat necessary to support healthy, sustainable, and harvest able populations constitute a major, but not the only, concern. American Indian people have concern for all factors that keep the ecosystem healthy.

#### **Findings from the ICBEMP Scientific Assessment Not Applicable to the Andrews MU/Steens Mountain CMPA Subbasin Review Area**

Following is a description of ICBEMP broad-scale findings determined by the BLM team to be not applicable to the subbasin review area. The reasons why the findings are not applicable are given.

**Finding:** Noxious weeds are spreading rapidly, and in some cases exponentially, on rangelands in every range cluster.

**Response:** Noxious weeds, although present on the Planning Area, are not spreading rapidly in every range cluster and the Burns BLM has implemented an integrated weed management program.

**Finding:** Expansion of agricultural and urban areas on non-federal lands has reduced the extent of some rangeland potential vegetation groups, most notably dry grasslands, dry shrublands, and riparian areas. Changes in some of the remaining habitat patches and loss of native species diversity have contributed to a number of wildlife species declines, some to the point of special concern (such as sage-grouse, Columbian sharp-tailed grouse, California bighorn sheep, pygmy rabbit, kit fox, and Washington ground squirrel).

**Response:** The Planning Area has not experienced expansion of agricultural and urban areas on non-federal lands.

**Finding:** Increased fragmentation and loss of connectivity within and between blocks of habitat, especially in shrub steppe and riparian areas, have isolated some habitats and populations and reduced the ability of populations to move across the landscape, resulting in long-term loss of genetic interchange.

**Response:** There has not been fragmentation and loss of habitat connectivity in the Planning Area; in fact, the BLM has acquired parcels for incorporation into contiguous lands under BLM administration, which increases habitat connectivity.

**Finding:** Fire frequency has decreased in many locations resulting in an increase in conifer encroachment; an increase in tree density in formerly savanna-like stands of juniper and ponderosa pine; and increased density and/or coverage of big sagebrush and other shrubs, with an accompanying loss of herbaceous vegetation.

**Response:** Conifers are not readily present in the Planning Area and are not encroaching.

**Finding:** Interior ponderosa pine has decreased across its range with a significant decrease in old single story structure. The primary transitions were to interior Douglas fir and grand fir/white fir.

**Response:** Ponderosa pine has not occurred historically and does not presently occur within the Planning Area.

**Finding:** There has been a loss of the large tree component (live and dead) within roaded and harvested areas. This decrease affects terrestrial wildlife species that are closely associated with these old forest structures.

**Response:** The Planning Area is not forested; therefore, a loss of large trees has not occurred.

**Finding:** Western larch has decreased across its range. The primary transitions were to interior Douglas fir, lodgepole pine, or grand fir/white fir.

**Response:** Western larch has not occurred historically and does not presently occur within the Andrews MU/Steens Mountain CMPA subbasin review area.

**Finding:** Western white pine has decreased by 95 percent across its range. The primary transitions were to grand fir/white fir, western larch, and shrub/herb/tree regeneration.

**Response:** The Planning Area contains a very small (approximately 40 acres) stand of white fir and it has not changed substantially in size

**Finding:** The whitebark pine/alpine larch potential vegetation type has decreased by 95 percent across its range, primarily through a transition into the whitebark pine cover type. Overall, however, the whitebark pine cover stand has also decreased, with compensating increases in Engelmann spruce/subalpine fir.

**Response:** Whitebark pine/alpine larch potential vegetation type has not occurred historically and does not presently occur within the Andrews MU/Steens Mountain CMPA subbasin review area.

**Finding:** Generally, mid-seral forest structures have increased in dry and moist forest potential vegetation groups (PVG), with a loss of large, scattered, and residual shade-intolerant tree components, and an increase in the density of smaller shade-tolerant diameter trees.

**Response:** The Planning Area does not have forest habitat.

**Finding:** There has been an increase in fragmentation and a loss of connectivity within and between blocks of late-seral, old forests, especially in lower elevation forests and riparian areas. This has isolated some animal habitats and populations and reduced the ability of populations to move across the landscape, resulting in a long-term loss of genetic interchange.

**Response:** The Planning Area does not contain old-growth forests.

**Finding:** Habitat for several forest carnivores and omnivores is in decline.

**Response:** The Planning Area does not have forest habitat.

**Finding:** Insects and diseases always existed in forests, but the size and intensity of their attacks has increased in recent years due to increased stand density.

**Response:** The Planning Area does not have forest habitat.

**Finding:** Dry forests have had an increase in fuel loading, duff depth, stand density, and a fuel ladder that can carry fire from the surface into the tree crowns. As a result, wildfire intensity has increased.

**Response:** The Planning Area does not have forest habitat.

**Finding:** Noxious weeds are spreading rapidly, and in some cases exponentially, in most dry forest types.

**Response:** Noxious weeds, although present on the Planning Area, are not spreading rapidly in dry forest types and the Burns BLM has implemented an integrated weed management program.

**Finding:** Primary causes of decline in old-forest habitats and early-seral habitats are intensive timber harvest and large-scale fir exclusion.

**Response:** Old-growth forest habitat has not occurred historically and does not presently occur within the Andrews MU/Steens Mountain CMPA subbasin review area.

**Finding:** Human interactions with wide-ranging carnivores are generally negative and large areas of the basin may not be used by wide-ranging carnivores; because of this, habitats for many riparian dependent terrestrial species, especially shrubland habitats, have declined.

**Response:** Wide-Ranging carnivores are not prevalent in the Planning Area; therefore, there are no commensurate elevated levels of herbivores impacting the identified habitat.

**Finding:** The composition, distribution, and status of fishes within the Planning Area are substantially different than they were historically. Some native fishes have been eliminated from large portions of their historical ranges.

**Response:** The composition, distribution, and status of fishes within the Planning Area have not substantially changed.

**Finding:** Wild chinook salmon and steelhead are near extinction in a major part of their remaining distribution.

**Response:** Chinook salmon and steelhead do not occur in the Andrews MU/Steens Mountain CMPA subbasin review area. No anadromous fish occur in the subbasin review area since only one drainage in the subbasin review area is a tributary to the Columbia River (Wild Cat Creek), and it is an ephemeral stream.

**Finding:** Development for a growing human population is encroaching on previously undeveloped areas adjacent to lands administered by the Forest Service and the BLM. New development can put stress on the political and physical infrastructure of rural communities, diminish habitat for some wildlife, and increase agency costs to manage fire to protect people and structures.

**Response:** The Planning Area is sparsely populated and rural; however, it is not experiencing any rapid population growth. The population is stable or declining.

**Finding:** Agency social and economic policy has emphasized the goal of supporting rural communities, specifically promoting stability in those communities deemed dependent on agency timber harvest and processing. Even-flow of timber sales, timber sale bidding methods, timber export restrictions, and small business set asides of timber sales have been the major policy tools on Forest Service-administered commercial forestlands. Regulation of grazing practices has been important on BLM administered rangelands.

**Response:** The BLM does not have a social and economic policy.

**Finding:** Agency social and economic policy has emphasized the goal of supporting rural communities, including tribal communities. The ability of agencies to assist tribal members and tribal communities depends on the effectiveness of agency land uses and management strategies to positively consider and influence these factors (tribal employment, subsistence, treaty/reserved rights, spiritual, cultural/social purposes).

**Response:** The BLM does not have a social and economic policy.

**Finding:** Predictability in timber sale volume from agency lands has been increasingly difficult to achieve. Advancing knowledge of ecosystem processes, changing societal goals, and changing forest conditions has undermined conventional assumptions underlying the quantity and regularity of timber supply from agency lands.

**Response:** The Planning Area does not have forest habitat and there are no timber sales.

**Finding:** There is low confidence and trust that American Indian rights and interests are considered when decisions are proposed and made for actions to be taken on BLM administered lands.

**Response:** The Burns Paiute Tribe is the primary consultation partner for the Planning Area. The BLM has an active relationship with this tribe.

**Finding:** Indian tribes do not feel that they are involved in the decision-making process commensurate with their legal status. They do not feel that government-to-government consultation is taking place.

**Response:** The BLM has semi-annual project summary meetings and consultation on all projects in the Planning Area of interest to the tribe.

**Finding:** Culturally significant species such as anadromous fish and the habitat necessary to support healthy, sustainable, and harvest able populations constitute a major, but not the only, concern. American Indian people have concern for all factors that keep the ecosystem healthy.

**Response:** The Planning Area does not have and has not historically had anadromous fish and the habitat necessary to support healthy, sustainable, and harvest able populations of anadromous fish.

#### Mid-scale Character Description (Resource Area Profile)

The Description of the Mid-scale Character, Step 3 of the subbasin review process, was combined with the Resource Area Profile (RAP) of the AMS. Both the RAP and the Mid-scale Character are descriptions of the existing resources in the subbasin review area as well as their condition and use. The only difference is that the RAP covers all resources in the Planning Area, whereas the Description of the Mid-scale Character is tied to the ICBEMP findings for issue identification. Resources addressed by the findings are described for the subbasin review area as a whole. These include rangelands, woodlands, vegetation, fish and wildlife habitat, water quality, riparian habitats, and human uses and values. Those resources not addressed by the findings are described for the Andrews MU and Steens Mountain CMPA only.

Prior to the meeting of the subbasin review team, the Burns DO staff had begun to prepare mid-scale characterization, by resource, as they pertained to the mid-scale findings and issues for the subbasin review area. This was the next step in the subbasin review process. At the meeting, the group went over the draft characterizations and suggested changes and additions. The current status of each resource pertaining to the findings was described. Management concerns for the resources were identified. A listing of the concerns, by resource, is presented as the issues in Section 6.1.

These management concerns will be used in developing the Management Opportunities chapter of the AMS (Chapter 4) and will also be used in setting priorities and making recommendations as the final step in the subbasin review process. Eventually, this information will feed into the development of alternatives for the RMP/EIS.

The complete descriptions of the mid-scale character are included as Chapter 2 of this AMS.

#### Priorities and Recommendations (Management Opportunities)

This is Step 4 of the subbasin review process. This step is analogous to the Management Opportunities step in preparing the AMS. In both cases, management opportunities or management recommendations are identified and priority setting is begun. In the subbasin review, the priorities would set the stage for fine scale, or activity level or project planning; however, in this situation where the subbasin review and AMS are combined, the priority setting is begun at this stage, but is carried forward and refined in preparing the RMP/EIS. After that would come the fine scale planning. The Management Opportunities/Priorities and Recommendations are in Chapter 4 of the AMS document.

The group then examined the mid-scale descriptions of 22 resources of concern. The team discussed the management concerns pertaining to these resources and “brainstormed” management opportunities and recommendations to address



these concerns. This set the stage for the BLM staff to identify management opportunities for all resources to be addressed in the RMP/EIS. The following is a listing of the management opportunities by resource.

#### *Air Resources*

Meet or exceed the National Ambient Air Quality Standards and the Prevention of Significant Deterioration with all authorized actions.

#### *Energy and Mineral Resources*

Provide opportunities for exploration and development of leasable energy and mineral resources while protecting other sensitive resources. Provide opportunities for exploration and development of locatable mineral resources while protecting other sensitive resources. Provide for public demand for saleable minerals from public land while protecting sensitive resources.

#### *Fire*

Provide an Appropriate Management Response (AMR) on all wildland fires, with emphasis on fire fighter and public safety, minimizing suppression costs, benefits, and values to be protected, consistent with resource objectives. Recognize fire as a critical natural process and use it to protect, maintain, and enhance resources.

#### *Vegetation*

Restore, protect, and enhance the diversity and distribution of desirable vegetation communities, including perennial native and desirable introduced plant species. Provide for their continued existence and normal function in nutrient, water, and energy cycles. Manage big sagebrush cover in seedings and on native rangelands to meet the life history requirements of sagebrush dependent wildlife. Control the introduction and proliferation of noxious weed species and reduce the extent and density of established weed species to within acceptable limits.

#### *Woodlands*

Manage woodlands to maintain or restore ecosystems to a condition in which biodiversity is preserved and occurrences of fire, insects, and disease do not exceed levels normally expected in a healthy woodland. Manage woodlands for long-term healthy habitat for animal and plant species. Restore productivity and biodiversity in juniper and aspen woodland areas. Manage juniper areas where encroachment or increased density is threatening other resource values. Retain old growth characteristics in historic juniper sites not prone to frequent fire. Manage aspen to maintain diversity of age classes and to allow for species reestablishment.

#### *Special Status Plant Species*

Manage public land to maintain, restore, or enhance populations and habitats of special status plant species. Priority for the application of management actions would be: (1) federal endangered species, (2) federal threatened species, (3) federal proposed species, (4) federal candidate species, (5) state listed species, (6) BLM sensitive species, (7) BLM assessment species, and (8) BLM tracking species. Manage in order to conserve or lead to the recovery of threatened or endangered species.

#### *Water Resources and Riparian/Wetlands*

Ensure that surface water and groundwater influenced by BLM activities comply with or are making progress toward achieving State of Oregon water quality standards for beneficial uses as established per stream by the ODEQ. Restore, maintain, or improve riparian vegetation, habitat diversity, and associated watershed function to achieve healthy and productive riparian areas and wetlands. Where water rights are needed to support programs and projects within the Planning Area, they will be secured through normal channels as prescribed by state law.

#### *Fish and Aquatic Habitat*

Restore, maintain, or improve habitat to provide for diverse and self-sustaining communities of fishes and other aquatic organisms.

### *Wildlife and Wildlife Habitat*

Maintain, restore, or enhance riparian areas and wetlands so they provide diverse and healthy habitat conditions for wildlife. Manage upland wildlife habitats to ensure that the necessary forage, water, cover, structure, and security are available on public land.

### *Special Status Animal Species*

Manage public land to maintain, restore, or enhance populations and habitats of Special status animal species. Priority for the application of management actions would be: (1) federal endangered species, (2) federal threatened species, (3) federal proposed species, (4) federal candidate species, (5) state listed species, (6) BLM sensitive species, (7) BLM assessment species, and (8) BLM tracking species. Manage in order to conserve or lead to the recovery of threatened or endangered species. Facilitate the maintenance, restoration, and enhancement of bighorn sheep populations and habitat on public land. Pursue management in accordance with Oregon's Bighorn Sheep Management Plan in a manner consistent with the principles of multiple-use management.

### *Wild Horses*

Maintain and manage wild horse herds in established HMAs at AMLs to ensure or enhance a thriving natural ecological balance between wild horse populations, wildlife, livestock, vegetation resources, and other resource values. Enhance and perpetuate special and unique characteristics that distinguish the respective herds.

### *Grazing Management*

Grazing will be in compliance with current policy which includes the Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands in Oregon and Washington. Provide for a sustained level of livestock grazing consistent with other resource objectives and public land use allocations. Livestock grazing in the Andrews MU will be managed under laws provided by the Taylor Grazing Act, Public Rangelands Improvement Act, national Environmental Policy Act, Wilderness Act, the Act and BLM regulations. The RMP will include the Standards for Rangeland Health and Guidelines for grazing management which apply to all BLM lands in Oregon. The RMP will address several pasture and allotment boundary changes occurring as a result of land exchanges, forage offsets for creation of the No Livestock Grazing Area and grazing management changes.

### *Recreation*

Provide and enhance developed and undeveloped recreation opportunities and manage the increasing demand for resource-dependent recreation activities while protecting resources.

### *Off-Highway Vehicles*

Manage OHV use to protect resource values, promote public safety, provide OHV use opportunities where appropriate, and minimize conflicts among various users.

### *Visual Resources*

Manage public land actions and activities in a manner consistent with VRM class objectives.

### *Areas of Critical Environmental Concern*

Retain existing and designate new ACECs/RNAs where relevance and importance criteria are met and special management is required to protect the values identified.

### *Wild and Scenic Rivers*

Protect and enhance ORVs of designated NWSRS and protect and enhance ORVs of rivers found suitable for WSR status until Congress acts.

*Wilderness*

Designated Wilderness Areas will be managed under the Wilderness Management Policy. The wilderness resources will be dominant whenever choices must be made between preservation of the wilderness character and visitor use.

*Wilderness Study Areas*

BLM administered land identified in the Wilderness Study Report and determined to have wilderness values could be included in adjacent WSAs and managed under the WSA IMP.

*Human Uses and Values*

Manage public land and pursue partnerships in order to provide social and economic benefits to local residents, businesses, visitors, and for future generations.

*Cultural Resources*

Protect and conserve cultural and paleontological resources. Increase the public's knowledge, appreciation, and sensitivity regarding cultural and paleontological resources. Consult and coordinate with American Indian groups to ensure that their traditional religious sites, land forms, resources, and other interests are considered.

*Land and Realty*

Retain public land with high public resource values. Consolidate public land holdings and acquire land or interests in land with high public resource values to ensure effective administration and improve resource management. Acquired land would be managed for its intended purpose. Make public land available for disposal within Zone 3 by state indemnity selection, private or state exchange, Recreation and Public Purpose Act lease or sale, public sale, or other authorized method. Establish utility and transportation system corridor routes to the extent possible, considering avoidance areas, and consistent with resource objectives.

**BLM Resource Management Planning Process**

During the resource management planning process, the BLM will set priorities for acting on these recommendations and opportunities. Emphasis will be placed on opportunities for protecting and managing special areas such as Areas of Critical Environmental Concern; opportunities for management of resources across administrative boundaries such as watersheds, aquatic species, and noxious weeds; and opportunities for control of juniper expansion.

BLM staff incorporated the descriptions of the mid-scale character and the recommendations into the RAP and management opportunities sections, respectively, of the AMS. The similarities between the subbasin review process and the AMS process are shown in the following table. The integrated priority setting described in the subbasin review for BLM actions will be conducted through the RMP.

**Table 6.1: Steps in the Subbasin Review and Analysis of Management Situation**

<b>Subbasin Review</b>		<b>Analysis of the Management Situation</b>	
<u>Step</u>		<u>Step</u>	
1.	Prepare for the Review	1.	Collect and Consolidate Data
2.	Identify Mid-scale Issues	2.	Conduct Internal and Public Scoping
3.	Describe Mid-scale Character (Describe character of the review area in relationship to the issues)	3.	Resource Area Profile (Describe the condition of the resource area, including its physical, biological and human environment)
	No step in subbasin review corresponds to Existing Management Situation of the AMS	4.	Existing Management Situation (Describe for each resource its current uses, production, or protection problems and the management practices and direction)
4.	Develop recommendations and integrated priority setting. (Develop recommended actions and determine urgency and timing of actions)	5.	Identify Management Opportunities (Identify and evaluate all reasonable opportunities and/or actions to address the planning issues and management concerns)
5.	Subbasin Review Report (Document the subbasin review results and the process. Provide information for further planning)	6.	Prepare the AMS (Develop a comprehensive document for use by the BLM and a summary document for public distribution. Provide information for RMP/EIS)